Will Simmons

Weill Cornell Medicine, New York, NY

simmwill.github.io

Education

M.P.H.	Epidemiology & Biostatistics, 2020	GPA: 4.0
	Columbia University, New York, NY	

B.S.	Neuroscience, 2015	GPA: 4.0
	Baylor University, Waco, TX	

Experience

Professional and Research

2020–	Weill Cornell Medicine, Division of Biostatistics, Department of Population Health Sciences	New York, NY
	Research Biostatistician II (2022–)	
	Programmer Analyst I (2020–2022)	
2019–2020	Columbia University Mailman School of Public Health	New York, NY
	Graduate Research Assistant, Department of Epidemiology	
2019–2020	Columbia University Earth Institute	Palisades, NY
	Graduate Research Assistant, International Research Institute for Climate and Society	
2015–2018	Hawai'i Alliance for Community Based Economic Development	Honolulu, HI
	Grantwriter	
2015	Our Children, Their Nutrition	Waco, TX
	Lead Program Evaluator	

Teaching

Weill Cornell Medicine, M.S. Biostatistics and Data Science Program
  Teaching Assistant, SQL & Database Management (Spring 2022)
  Teaching Assistant, Data Science I (Fall 2021)

Columbia University Mailman School of Public Health
  Teaching Assistant, SQL Bootcamp (Summer 2022)
  Teaching Assistant, Quantitative Research Methods (Fall 2019)

Funding, Honors, and Memberships

Grants and Scholarships

2018–2020	Wyman Scholar, Columbia University Mailman School of Public Health (full tuition: 2 years of graduate study)
2013	Glennis McCrary Goodrich Scholarship Award for International Research ($3,500)
2011–2015	Regent's Gold Scholar, Baylor University (full tuition: 4 years of undergraduate study)

Awards and Honors

2020	First prize research poster, NYC Clinical Climate Change Conference
2019	First prize research presentation, Master's Student Day, Columbia University Department of Epidemiology

Professional Memberships

2021–	Member, Scientific Committee, NYC Epidemiology Forum
2021–	Member, American Statistical Association
2014–	Member, Phi Beta Kappa Honor Society

Publications

Published:

2022   Batra R, Uni R, Akchurin OM, Alvarez-Mulett S, Gómez-Escobar LG, Hoffman KL, **Simmons W**, Chetnik K, Buyukozkan M, Benedetti E, Suhre K, Schmidt F, Schenck E, Cho SJ, Choi AMK, Choi ME, Krumsiek J. "Multi-omic comparative analysis of COVID-19 and bacterial sepsis-induced ARDS." (In press.) *PLOS Pathogens*.

2022   Acker KP, Levine DA, Varghese M, Nash KA, RoyChoudhury A, Abramson EL, Grinspan ZM, **Simmons W**, Wu A, Han J-Y. "Indications for Hospitalization in Children with SARS-CoV-2 Infection during the Omicron Wave in New York City." *Children*. 2022; 9(7):1043. doi.org/10.3390/children9071043.

2022   Flory JH, Min JY, Banergee S, Mushlin AI, Williams N, Reese A, **Simmons W**, Wang F, Zhang Y. "Association between antidiabetic drug use and the risk of COVID-19 hospitalization in the INSIGHT Clinical Research Network in New York City." *Diabetes, Obesity and Metabolism*. 2022; 24 (7), 1402. doi.org/10.1111/dom.14704.

2022   Buyukozkan M, Alvarez-Mulett S, Racanelli AC, Schmidt F, Batra R, Hoffman KL, Sarwath H, Engelke R, Gomez-Escobar L, **Simmons W**, Benedetti E, Chetnik K, Zhang G, Schenck E, Suhre K, Choi JJ, Zhao Z, Racine-Brzostek S, Yang HS, Choi ME, Choi AMK, Cho SJ, Krumsiek J. "Integrative metabolomic and proteomic signatures define clinical outcomes in severe COVID-19." *iScience*. 2022 Jul 15;25(7):104612. doi.org/10.1016/j.isci.2022.104612.

2022   Min JY, Williams N, **Simmons W**, Banergee S, Wang F, Zhang Y, Mushlin AI, Flory JH. (2022). "Baseline hemoglobin A1c and the risk of COVID-19 hospitalization and death among type 2 diabetes patients in the INSIGHT Clinical Research Network." *Diabetic Medicine*. 2022 May; 39(5): e14815. doi.org/10.1111/dme.14815.

2021   Downs SD, **Simmons W**, Nissan H. (2022). "Building climate-sensitive nutrition programmes [Élaboration de programmes de nutrition adaptés au climat]." *Bulletin of the World Health Organization, 100*(1), 70-77. doi.org/10.2471/BLT.21.285589.

2021   **Simmons W**, Stingone J, Luben T, Sheridan S, Langlois P, Shaw G, Reefhuis J, Romitti P, Feldkamp M, Nembhard W, Browne M, Lin S, and the National Birth Defects Prevention Study. (2021). "Modeling complex effects of exposure to particulate matter and extreme heat during pregnancy on congenital heart defects: a U.S. population-based case-control study in the National Birth Defects Prevention Study." *Science of the Total Environment*, 152150. doi.org/10.1016/j.scitotenv.2021.152150.

In preparation:

2021   Zhang WZ, **Simmons W**, Kim K, Hoffman K, Haber L, Goyal P, Schenck E, Plataki M, Choi AMK, Cloonan SM. "Macrophage ferritin light chain secretion is a protective response in Acute Respiratory Distress Syndrome (ARDS) with relevance for COVID-19 induced critical illness." Target: *American Journal of Respiratory and Critical Care Medicine*.

Presentations and Invited Talks

*Presenting author.

2022   **Simmons W***. "`dbplyr` and the tidy-SQL-verse." Invited presentation, Weill Cornell Biostatistics Computing Club. New York, NY. Link to slides.

2021   **Simmons W***. "`data.table` and `dtplyr`: R packages for high-efficiency data processing." Invited lecture, Data Science I, Weill Cornell M.S. Biostatistics and Data Science. New York, NY. Link to slides.

2021   **Simmons W***, Stingone J, Luben T, et al. "Modeling complex effects of exposure to particulate matter and extreme heat during pregnancy on congenital heart defects." Poster presentation, 33rd Annual Conference for the International Society of Environmental Epidemiology. Virtual. doi.org/10.1289/isee.2021.P-571.

2021   **Simmons W***. "Balancing reproducibility and modifiability: ETL pipelines using R and the REDCap API." Invited presentation, Weill Cornell Biostatistics Computing Club. New York, NY. Link to slides.

2020   **Simmons W***, Nissan H. "Climate variation and anthropometric indicators of under-5 nutrition: Bangladesh, 1990-2006." Poster, 2nd Annual Conference on Clinical Climate Change. Icahn School of Medicine at Mount Sinai. New York, NY. First prize. Link to poster.

2019   **Simmons W***, Nissan H. "Associations between climate and under-5 nutritional status in Bangladesh, 1990-2006." Invited presentation, Epidemiology Master's Student Day. Columbia University Mailman School of Public Health. New York, NY. First prize. Link to slides.

2016   **Simmons W**, Baker L*. "Clean water, food security, or protein? A study of growth among children in rural Kenya." Presentation, 13th Annual Global Health & Innovation Conference. Yale University, New Haven, CT.

Technical Skills

Languages, Software, & Tools   **Certifications**

Daily: R, SQL, Git/DVCS/GitHub   HIPAA, CITI Human Subjects
As needed: R Shiny, SAS, QGIS, LaTeX, REDCap